

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) A manufacturing method of a semiconductor device, comprising the steps of:

selectively injecting impurities into a semiconductor substrate to form an impurity region;

processing a laser beam having a fundamental wave into a long beam on a surface of the impurity region; and

moving the surface of the impurity region relatively to the long beam to scan the laser beam to activate the impurity region.

2. (Original) A manufacturing method of a semiconductor device, comprising the steps of:

forming a gate insulating film over a semiconductor layer of a SOI substrate;

forming a gate electrode over the gate insulating film;

selectively injecting impurities into the semiconductor layer of the SOI substrate to form an impurity region;

processing a laser beam having a fundamental wave into a long beam on a surface of the impurity region; and

moving the surface of the impurity region relatively to the long beam to scan the laser beam to activate the impurity region.

3. (Original) The manufacturing method of a semiconductor device according to claim 1 or 2, wherein the impurity region is source and drain regions of a field effect transistor.

4. (Original) The manufacturing method of a semiconductor device according to claim 1 or 2, wherein the impurity region is an extension region of a field effect transistor.

5. (Currently Amended) The manufacturing method of a semiconductor device according to ~~any one of claims 1 to 4~~ claim 1 or 2, wherein the laser beam having a fundamental wave is oscillated with a pulse width of 1 femtosecond or more and 10 picoseconds or less.

6. (Currently Amended) The manufacturing method of a semiconductor device according to ~~any one of claims 1 to 5~~ claim 1 or 2, wherein the laser beam having a fundamental wave is emitted from one kind of lasers in which one or more of Nd, Yb, Cr, Ti, Ho and Er, is/are added as a dopant into a crystal of Sapphire, YAG, ceramics YAG, ceramics  $\text{Y}_2\text{O}_3$ , KGW, KYW,  $\text{Mg}_2\text{SiO}_4$ , YLF,  $\text{YVO}_4$ , or  $\text{GdVO}_4$ .

7. (Currently Amended) The manufacturing method of a semiconductor device according to ~~any one of claims 1 to 6~~ claim 1 or 2, wherein the laser beam is pulsed laser light with a repetition rate of 10MHz or more.

8. (Currently Amended) A semiconductor device having an integrated circuit including a field effect transistor, comprising:

a gate insulating film formed over a semiconductor layer;

a gate electrode provided over the gate insulating film;

a channel forming region formed in the semiconductor layer under the gate electrode through the gate insulating film;

an extension region into which an n-type or p-type impurity element is added, and which is located on opposite sides of the channel forming region; and

a source region and a drain region which are in contact with the extension region,

wherein the extension region [[is]] has a junction depth shallower than the source region and the drain region; and

wherein a length of the channel forming region is 5 nm or more and 80 nm or less.

9. (Original) The semiconductor device according to claim 8, the length of the channel forming region is equal to a width of the gate electrode.

10. (Original) The semiconductor device according to claim 8 or 9, wherein the integrated circuit includes at least one of a controller, a CPU and a memory.